

## REMARKS

Claims 2-121 are in the application.

The Examiner has raised a question regarding the priority claim of the present application. Applicant has amended the specification to reflect, and Applicant confirms its priority based on, the following: this application is a continuation of U.S. application Serial No. 08/909,664, filed August 12, 1997, now U.S. Patent No. 6,264,470, which is a continuation of application Serial No. 08/582,054 filed January 2, 1996, now U.S. Patent No. 5,759,030. Applicant submits that this should address the priority claim issue, but requests a further opportunity to discuss this matter with the Examiner if this is believed not to be correct by the USPTO.

The Examiner has rejected the claims based on an obviousness-type double patenting rejection. While Applicant does not necessarily agree with these rejections, in an effort to expedite prosecution Applicant is submitting a terminal disclaimer under separate cover, which should obviate these rejections.

All claims were rejected under Section 102(b) based on WO 97/24075. This is in effect a CIP disclosure of the present application, and, in view of Applicant's priority claim as reflected above, this reference is not prior art to the present claims. Accordingly, Applicant submits that this rejection should be withdrawn.

Claims 82 (Applicant assumes that the Examiner meant claim 82, although the office action recited claim 28 in an apparent typographical error), 83, 91-95, 99, 113 and 114 were rejected under Section 102 in view of Massen, and claims 85-90, 96-98, 100-102 and 104-112 were rejected under Section 103 in view of Massen.

Applicant effectively has substituted a new claim 82 for the previous claim 82 (this being done for the sake of expediency and avoiding the need to renumber and recreate all dependent claims, etc.). For the convenience of the Examiner, Applicant notes that new claim 82 shares certain aspects with the other two independent claims 2 and 42; namely, an imaging element (e.g., camera) and a spectrometer apparatus (e.g., spectrophotometer). New claim 82 now recites a method of determining the optical characteristics of a dental object with an apparatus that includes an imaging element and a spectrometer apparatus in which an image of the dental object is generated with the imaging element and optical characteristics data indicative of optical characteristics of the dental object including at least color characteristics are generated with the

spectrometer apparatus. Under software control a determination is made of a plurality of regions of the dental object having different color characteristics. Optical characteristics of the dental object including at least color characteristics thus may be determined in the plurality of regions based on the spectrometer data generated with the spectrometer apparatus.

In accordance with new claim 82 and its various dependents, an imaging element may capture an image of the dental object, and precise color characteristics may be determined with the spectrometer apparatus. Thus, the imaging element may be configured to generate a desirable (e.g., quality) image of the dental object, while the spectrometer apparatus may be configured to generate a high quality, spectrometer-based color measure of the dental object, with the result that a quality image may be obtained of the dental object and quality color data may be taken of the dental object. This also allows such image and color data to be processed so that color characteristics thus may be determined in the plurality of regions based on the spectrometer data generated with the spectrometer apparatus.

Such attributes of Applicant's claimed invention are submitted to be neither disclosed in nor suggested by Massen or any other references of record (excluding Applicant's own application, etc., which are not prior art to the presently pending claims). Based on the foregoing, claims 82-121 are submitted to be patentably distinguishable over the art of record.

The Examiner also requested additional information regarding other of Applicant's related patents and applications. Applicant is submitting under separate cover additional information regarding Applicant's other patents and patent applications.

No new matter has been added.

If there are any questions regarding this amendment, Applicant's attorney requests an opportunity to discuss such questions with the Examiner by way of a telephone interview. It is submitted that the foregoing amendments should position the application in condition for allowance, and such is respectfully requested.

Please charge any additional fees due, or credit any overpayment, to Deposit Account No.  
50-0251.

Respectfully submitted,



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I hereby certify that the foregoing is being deposited with the U.S. Postal Service, postage prepaid, to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated above.

